

## ABSTRACT OF THE DISCLOSURE

A first semiconductor laminated structure including a first active layer for oscillating a first laser beam having a first wavelength band is provided on a front-side region of a substrate. A second semiconductor laminated structure including a second active layer for oscillating a second laser beam having a second wavelength band is provided on a rear-side region of the substrate. An emission direction of the first laser beam and an emission direction of the second laser beam are same.